

Submit 3 Copies To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87401
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

RECEIVED
JAN 07 2011
HOBBS

OIL CONSERVATION DIVISION
220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO.
30-025-27417

5. Indicate Type of Lease
STATE ☒ FEE ☐

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name
State HH

8. Well Number
001

9. OGRID Number
162683

10. Pool name or Wildcat
Gem; Bone Spring

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐

2. Name of Operator
Cimarex Energy Co. of Colorado

3. Address of Operator
600 N. Marienfeld, Ste. 600; Midland, TX 79701

4. Well Location
SHL Unit Letter H : 1980 feet from the North line and 660 feet from the East line
Section 36 Township 19S Range 32E NMPM County Lea

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
3582 GR

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____

Pit Liner Thickness: _____ Below-Grade Tank: Volume _____ bbls; Construction Material _____

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☒
PULL OR ALTER CASING ☒ MULTIPLE COMPL ☐
OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS ☐ P AND A ☐
CASING/CEMENT JOB ☐
OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Cimarex has changed the BHL of this well from 660 FNL & 660 FWL to 330 FSL & 660 FEL. Casing has also changed plugging and casing plans as shown below:

- Set CIBP @ 13190 w/ 35' cmt.
- Set CIBP @ 9100 w/ 2 sx sand.
- Mill window from 8780-8805 and kick off @ 8795.
- Drill 4 3/4" hole to TD @ 11879 MD, 9000 TVD. Run 3 1/2" 9.3# P110 LTC from 0-11879. Cement with 250SKS Versacem - H + 0.5% Halad(R)-344 + 0.4% CFR-3 + 1 lbm/sk salt + 0.1% HR-601 14.5ppg 1.22 yield.

See attached C-102 and preliminary directional plan.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Natalie Krueger TITLE Regulatory Analyst DATE January 6, 2011

Type or print name Natalie Krueger email address: nkrueger@cimarex.com Telephone No. 432-620-1936

For State Use Only

APPROVED BY: [Signature] TITLE PETROLEUM ENGINEER DATE JAN 10 2011

Conditions of Approval (if any):

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

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1301 W. Grand Avenue, Artesia, NM 88210

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1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised July 18, 2010

Submit one copy to appropriate
District Office

RECEIVED
JAN 07 2011
HOBBSDOCD

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-27417	Pool Code 27220	Pool Name Gem; Bone Spring
Property Code 300556	Property Name STATE HH	Well Number 1
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3578'

Surface Location

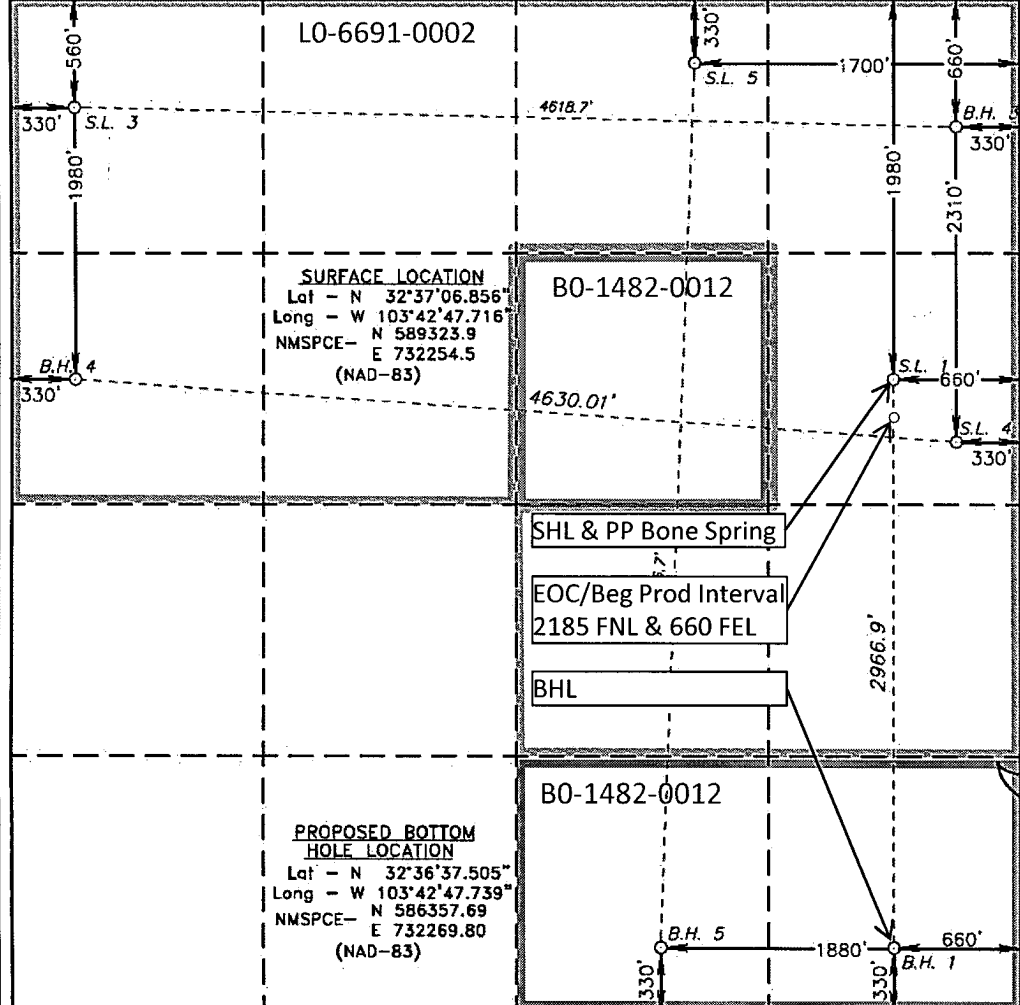
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	36	19 S	32 E		1980	NORTH	660	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	36	19 S	32 E		330	SOUTH	660	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
480		P	

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <u>Zeno Farris</u> 1/6/2011 Signature Date Zeno Farris Printed Name zfarris@cimarex.com Email Address SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief. <u>GARY L. JONES</u> 2010 Date Surveyed <u>GARY L. JONES</u> Signature & Seal of Professional Surveyor Certificate No. Gary L. Jones 7977 BASIN SURVEYS 23900
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Cimarex Energy Co.

Location: Lea County, NM
Field: (State HH) Sec 36, T19S, R32E
Facility: State HH No. 1H

Slot: No. 1H SHL
Well: No. 1H
Wellbore: No. 1H PWB



Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	0.00	0.000	179.685	0.00	0.00	0.00	0.00	0.00
EST. KOP	8795.00	0.000	179.685	8795.00	0.00	0.00	0.00	0.00
END OF CURVE	9117.12	90.001	179.685	9000.07	-205.07	1.13	27.94	205.07
No. 1H PBHL	11878.46	90.001	179.685	9000.00	-2966.36	16.30	0.00	2966.41

Plot reference wellpath is Prelim 6

True vertical depths are referenced to Rig on No. 1H SHL (KB)

Grid System: NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet

Measured depths are referenced to Rig on No. 1H SHL (KB)

North Reference: Grid north

Rig on No. 1H SHL (KB) to Mean Sea Level: 3599 feet

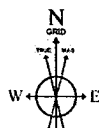
Scale: True distance

Mean Sea Level to Mud line (Facility: State HH No. 1H): -3582 feet

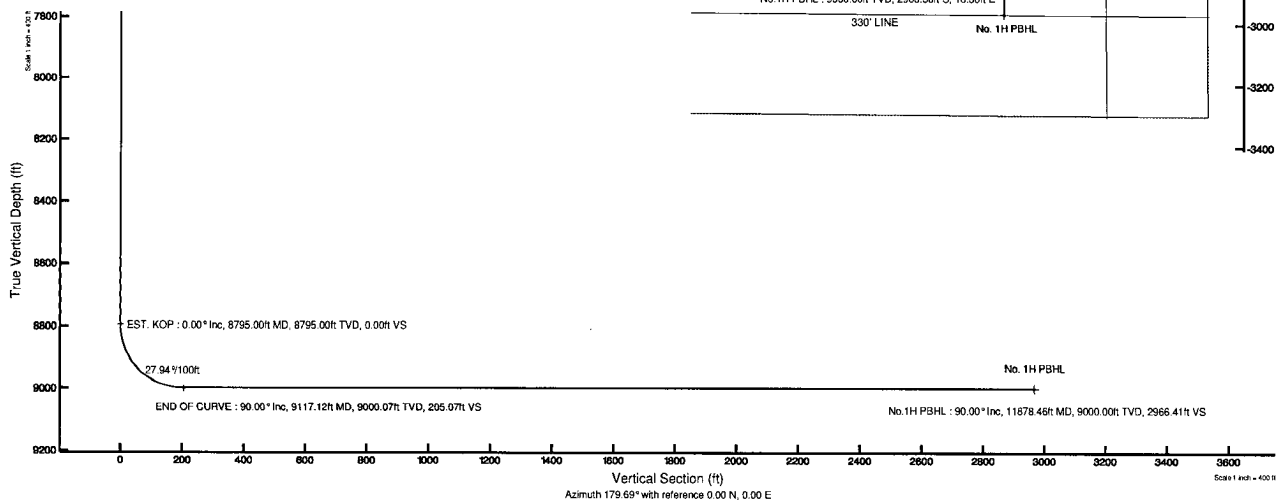
Depths are in feet

Coordinates are in feet referenced to Slot

Created by: gomeoscr on 1/6/2011



BGGM (1945.0 to 2012.0) Dip: 60.55° Field: 48919.3 nT
Magnetic North is 7.79 degrees East of True North (at 1/6/2011)
Grid North is 0.33 degrees East of True North
To correct azimuth from True to Grid subtract 0.33 degrees
To correct azimuth from Magnetic to Grid add 7.45 degrees
For example: If the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.45 = 97.45





Planned Wellpath Report

Prelim_6
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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 1H SHL
Area	Lea County, NM	Well	No. 1H
Field	(State HH) Sec 36, T19S, R32E	Wellbore	No. 1H PWB
Facility	State HH No. 1H		

REPORT SETUP INFORMATION

Projection System	NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect® 2.0
North Reference	Grid	User	Gomeoscr
Scale	0.999951	Report Generated	1/6/2011 at 1:29:54 PM
Convergence at slot	0.33° East	Database/Source file	WA Midland/No. 1H_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W
Facility Reference Pt			732253.50	589323.90	32°37'06.856"N	103°42'47.727"W
Field Reference Pt			730941.22	588045.42	32°36'54.281"N	103°43'03.157"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 1H SHL (KB) to GL	17.00ft
Horizontal Reference Pt	Slot	Rig on No. 1H SHL (KB) to Mean Sea Level	3599.00ft
Vertical Reference Pt	Rig on No. 1H SHL (KB)	GL to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 1H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	179.69°



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 1H SHL
Area	Lea County, NM	Well	No. 1H
Field	(State HH) Sec 36, T19S, R32E	Wellbore	No. 1H PWB
Facility	State HH No. 1H		

WELLPATH DATA (122 stations) † = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	179.685	0.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	Tie On
100.00†	0.000	179.685	100.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
200.00†	0.000	179.685	200.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
300.00†	0.000	179.685	300.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
400.00†	0.000	179.685	400.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
500.00†	0.000	179.685	500.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
600.00†	0.000	179.685	600.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
700.00†	0.000	179.685	700.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
800.00†	0.000	179.685	800.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
900.00†	0.000	179.685	900.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
1000.00†	0.000	179.685	1000.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
1100.00†	0.000	179.685	1100.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
1200.00†	0.000	179.685	1200.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
1300.00†	0.000	179.685	1300.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
1400.00†	0.000	179.685	1400.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
1500.00†	0.000	179.685	1500.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
1600.00†	0.000	179.685	1600.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
1700.00†	0.000	179.685	1700.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
1800.00†	0.000	179.685	1800.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
1900.00†	0.000	179.685	1900.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
2000.00†	0.000	179.685	2000.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
2100.00†	0.000	179.685	2100.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
2200.00†	0.000	179.685	2200.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
2300.00†	0.000	179.685	2300.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
2400.00†	0.000	179.685	2400.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
2500.00†	0.000	179.685	2500.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
2600.00†	0.000	179.685	2600.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
2700.00†	0.000	179.685	2700.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
2800.00†	0.000	179.685	2800.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
2900.00†	0.000	179.685	2900.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
3000.00†	0.000	179.685	3000.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
3100.00†	0.000	179.685	3100.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
3200.00†	0.000	179.685	3200.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
3300.00†	0.000	179.685	3300.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
3400.00†	0.000	179.685	3400.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
3500.00†	0.000	179.685	3500.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
3600.00†	0.000	179.685	3600.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
3700.00†	0.000	179.685	3700.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
3800.00†	0.000	179.685	3800.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
3900.00†	0.000	179.685	3900.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
4000.00†	0.000	179.685	4000.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
4100.00†	0.000	179.685	4100.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
4200.00†	0.000	179.685	4200.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
4300.00†	0.000	179.685	4300.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
4400.00†	0.000	179.685	4400.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	



Planned Wellpath Report

Prelim_6

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 1H SHL
Area	Lea County, NM	Well	No. 1H
Field	(State HH) Sec 36, T19S, R32E	Wellbore	No. 1H PWB
Facility	State HH No. 1H		

WELLPATH DATA (122 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4500.00†	0.000	179.685	4500.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
4600.00†	0.000	179.685	4600.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
4700.00†	0.000	179.685	4700.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
4800.00†	0.000	179.685	4800.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
4900.00†	0.000	179.685	4900.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
5000.00†	0.000	179.685	5000.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
5100.00†	0.000	179.685	5100.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
5200.00†	0.000	179.685	5200.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
5300.00†	0.000	179.685	5300.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
5400.00†	0.000	179.685	5400.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
5500.00†	0.000	179.685	5500.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
5600.00†	0.000	179.685	5600.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
5700.00†	0.000	179.685	5700.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
5800.00†	0.000	179.685	5800.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
5900.00†	0.000	179.685	5900.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
6000.00†	0.000	179.685	6000.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
6100.00†	0.000	179.685	6100.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
6200.00†	0.000	179.685	6200.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
6300.00†	0.000	179.685	6300.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
6400.00†	0.000	179.685	6400.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
6500.00†	0.000	179.685	6500.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
6600.00†	0.000	179.685	6600.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
6700.00†	0.000	179.685	6700.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
6800.00†	0.000	179.685	6800.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
6900.00†	0.000	179.685	6900.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
7000.00†	0.000	179.685	7000.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
7100.00†	0.000	179.685	7100.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
7200.00†	0.000	179.685	7200.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
7300.00†	0.000	179.685	7300.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
7400.00†	0.000	179.685	7400.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
7500.00†	0.000	179.685	7500.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
7600.00†	0.000	179.685	7600.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
7700.00†	0.000	179.685	7700.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
7800.00†	0.000	179.685	7800.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
7900.00†	0.000	179.685	7900.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
8000.00†	0.000	179.685	8000.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
8100.00†	0.000	179.685	8100.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
8200.00†	0.000	179.685	8200.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
8300.00†	0.000	179.685	8300.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
8400.00†	0.000	179.685	8400.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
8500.00†	0.000	179.685	8500.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
8600.00†	0.000	179.685	8600.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
8700.00†	0.000	179.685	8700.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	
8795.00	0.000	179.685	8795.00	0.00	0.00	0.00	732253.50	589323.90	32°37'06.856"N	103°42'47.727"W	0.00	EST. KOP
8800.00†	1.397	179.685	8800.00	0.06	-0.06	0.00	732253.50	589323.84	32°37'06.856"N	103°42'47.727"W	27.94	



Planned Wellpath Report

Prelim_6

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 1H SHL
Area	Lea County, NM	Well	No. 1H
Field	(State HH) Sec 36, T19S, R32E	Wellbore	No. 1H PWB
Facility	State HH No. 1H		

WELLPATH DATA (122 stations) † = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8900.00†	29.337	179.685	8895.47	26.30	-26.30	0.14	732253.64	589297.60	32°37'06.596"N	103°42'47.727"W	27.94	
9000.00†	57.277	179.685	8967.52	94.21	-94.21	0.52	732254.02	589229.69	32°37'05.924"N	103°42'47.728"W	27.94	
9100.00†	85.217	179.685	8999.35	187.97	-187.97	1.03	732254.53	589135.94	32°37'04.997"N	103°42'47.728"W	27.94	
9117.12	90.001	179.685	9000.07	205.07	-205.07	1.13	732254.63	589118.84	32°37'04.827"N	103°42'47.728"W	27.94	END OF CURVE
9200.00†	90.001	179.685	9000.07	287.95	-287.94	1.58	732255.08	589035.97	32°37'04.007"N	103°42'47.728"W	0.00	
9300.00†	90.001	179.685	9000.06	387.95	-387.94	2.13	732255.63	588935.98	32°37'03.018"N	103°42'47.729"W	0.00	
9400.00†	90.001	179.685	9000.06	487.95	-487.94	2.68	732256.18	588835.98	32°37'02.028"N	103°42'47.729"W	0.00	
9500.00†	90.001	179.685	9000.06	587.95	-587.94	3.23	732256.73	588735.99	32°37'01.039"N	103°42'47.730"W	0.00	
9600.00†	90.001	179.685	9000.06	687.95	-687.94	3.78	732257.28	588636.00	32°37'00.049"N	103°42'47.730"W	0.00	
9700.00†	90.001	179.685	9000.05	787.95	-787.94	4.33	732257.83	588536.00	32°36'59.060"N	103°42'47.730"W	0.00	
9800.00†	90.001	179.685	9000.05	887.95	-887.93	4.88	732258.38	588436.01	32°36'58.071"N	103°42'47.731"W	0.00	
9900.00†	90.001	179.685	9000.05	987.95	-987.93	5.43	732258.93	588336.02	32°36'57.081"N	103°42'47.731"W	0.00	
10000.00†	90.001	179.685	9000.05	1087.95	-1087.93	5.98	732259.48	588236.02	32°36'56.092"N	103°42'47.732"W	0.00	
10100.00†	90.001	179.685	9000.04	1187.95	-1187.93	6.53	732260.03	588136.03	32°36'55.102"N	103°42'47.732"W	0.00	
10200.00†	90.001	179.685	9000.04	1287.95	-1287.93	7.08	732260.58	588036.04	32°36'54.113"N	103°42'47.732"W	0.00	
10300.00†	90.001	179.685	9000.04	1387.95	-1387.93	7.63	732261.13	587936.04	32°36'53.123"N	103°42'47.733"W	0.00	
10400.00†	90.001	179.685	9000.04	1487.95	-1487.93	8.18	732261.68	587836.05	32°36'52.134"N	103°42'47.733"W	0.00	
10500.00†	90.001	179.685	9000.03	1587.95	-1587.92	8.73	732262.23	587736.06	32°36'51.144"N	103°42'47.734"W	0.00	
10600.00†	90.001	179.685	9000.03	1687.95	-1687.92	9.28	732262.78	587636.06	32°36'50.155"N	103°42'47.734"W	0.00	
10700.00†	90.001	179.685	9000.03	1787.95	-1787.92	9.83	732263.32	587536.07	32°36'49.165"N	103°42'47.734"W	0.00	
10800.00†	90.001	179.685	9000.03	1887.95	-1887.92	10.37	732263.87	587436.08	32°36'48.176"N	103°42'47.735"W	0.00	
10900.00†	90.001	179.685	9000.02	1987.95	-1987.92	10.92	732264.42	587336.08	32°36'47.187"N	103°42'47.735"W	0.00	
11000.00†	90.001	179.685	9000.02	2087.95	-2087.92	11.47	732264.97	587236.09	32°36'46.197"N	103°42'47.736"W	0.00	
11100.00†	90.001	179.685	9000.02	2187.95	-2187.92	12.02	732265.52	587136.10	32°36'45.208"N	103°42'47.736"W	0.00	
11200.00†	90.001	179.685	9000.02	2287.95	-2287.91	12.57	732266.07	587036.10	32°36'44.218"N	103°42'47.736"W	0.00	
11300.00†	90.001	179.685	9000.01	2387.95	-2387.91	13.12	732266.62	586936.11	32°36'43.229"N	103°42'47.737"W	0.00	
11400.00†	90.001	179.685	9000.01	2487.95	-2487.91	13.67	732267.17	586836.12	32°36'42.239"N	103°42'47.737"W	0.00	
11500.00†	90.001	179.685	9000.01	2587.95	-2587.91	14.22	732267.72	586736.12	32°36'41.250"N	103°42'47.738"W	0.00	
11600.00†	90.001	179.685	9000.01	2687.95	-2687.91	14.77	732268.27	586636.13	32°36'40.260"N	103°42'47.738"W	0.00	
11700.00†	90.001	179.685	9000.00	2787.95	-2787.91	15.32	732268.82	586536.14	32°36'39.271"N	103°42'47.738"W	0.00	
11800.00†	90.001	179.685	9000.00	2887.95	-2887.90	15.87	732269.37	586436.14	32°36'38.281"N	103°42'47.739"W	0.00	
11878.46	90.001	179.685	9000.00†	2966.41	-2966.36	16.30	732269.80	586357.69	32°36'37.505"N	103°42'47.739"W	0.00	No.1H PBHL

HOLE & CASING SECTIONS Ref Wellbore: No. 1H PWB Ref Wellpath: Prelim_6									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
6.125in Open Hole	8795.00	11878.46	3083.46	8795.00	9000.00	0.00	0.00	-2966.36	16.30



Planned Wellpath Report

Prelim_6

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 1H SHL
Area	Lea County, NM	Well	No. 1H
Field	(State HH) Sec 36, T19S, R32E	Wellbore	No. 1H PWB
Facility	State HH No. 1H		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) No. 1H PBHL	11878.46	9000.00	-2966.36	16.30	732269.80	586357.69	32°36'37.505"N	103°42'47.739"W	point
	1st Bone Spring								

SURVEY PROGRAM Ref Wellbore: No. 1H PWB Ref Wellpath: Prelim_6				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	12814.86	NaviTrak (Standard)		No. 1H PWB